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Underground Storage Tank Program **Frequently Asked Questions: 310 CMR 80.00**

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Contaminated Wastewater Management at UST Facilities (NEW)

These FAQs are intended to provide guidance to owners and operators of UST facilities about how to manage the waste fluids collected in sumps and spill buckets. Most Massachusetts UST facilities store gasoline, diesel oil and kerosene. USTs may also be used to store waste oil or other regulated substances. Some of the requirements for the proper management of these products are included here to explain certain prohibitions and handling options.

MassDEP's UST Regulation requires that spill buckets and sumps must be kept clean and free of solid and liquid material at all times. Any liquids or solids that enter spill buckets or sumps should be removed immediately and managed properly. Fluid that accumulates in sumps or spill buckets and is removed when a spill bucket or sump is cleaned is considered to be a regulated waste and must be managed as a hazardous waste or as an industrial wastewater, as applicable. Question 1 below discusses how this determination can be made. Question 2 below lays out the options for disposal of these fluids, as well as test fluids used to conduct hydrostatic testing of spill buckets and sumps.

1. How should I determine whether the wastewater from my UST facility's spill buckets and sumps is a hazardous waste or a non-hazardous industrial wastewater?

The UST facility owner or operator (who may be an employee of the owner or of a separate contractor) is responsible for determining if that wastewater is a hazardous waste or a non-hazardous industrial wastewater. This determination must be made either by testing the wastewater (according to the methods set forth in 310 CMR 30.152 and 30.155) or by applying knowledge of the hazardous characteristics of the wastewater in light of the materials or the processes used at the UST facility. If applying knowledge, the owner or operator must document that determination. Wastewater mixed with a petroleum product is "hazardous" if the mixture is *ignitable* (i.e., it has a flashpoint that is lower than 140° F) and/or it is *toxic* (the mixture fails the Toxic Characteristic Leaching Procedure test). In the absence of testing, any gas/water mixture is considered hazardous waste.

2. What are the requirements for managing fluids that are hazardous waste?

If the wastewater is a *gasoline-water mixture* it is considered to be a hazardous waste, unless it can be shown by testing or generator knowledge that it is not hazardous. Other wastewaters must also be evaluated, by testing or generator knowledge, to determine if they are hazardous. If it is determined that the waste is a hazardous waste, the generator (i.e., the facility owner, operator, or the contractor conducting hydrostatic tests of the spill buckets or sumps) has several management options and may:

- A. Send the gasoline-water mixture to be reclaimed, under the exemption established in 310 CMR 30.104(3) (e). Under this exemption, the generator may ship the wastewater off-site by (1) a common carrier using a bill of lading or (2) a hazardous waste transporter using either a manifest or bill of lading. The generator must also ensure that:
 - the wastewater is accumulated in containers that are sealed, structurally sound and labeled as a "Gasoline/Water Mixture For Reclamation – Ignitable – Toxic – Benzene";
 - records from the recycling facility demonstrating that each shipment was received and recycled in compliance with applicable state and federal laws and regulations are kept by the generator for three years from the date of recycling; and,
 - the recycling facility signs the bill of lading or manifest acknowledging receipt of the material and returns a copy after signature to the generator; or
- B. Ship the fluids (gasoline-water mixtures or other hazardous wastes) off-site as a hazardous waste using a licensed hazardous waste transporter; or
- C. If the owner or operator is a Very Small Quantity Generator (VSQG), self-transport up to one fifty-five gallon drum of hazardous wastewater at one time to another hazardous waste generator or to a licensed hazardous

waste facility. See MassDEP's fact sheet, "The Very Small Quantity Generator of Hazardous Waste (VSQG) at 310 CMR 30.353(7) at <http://www.mass.gov/eea/agencies/massdep/recycle/hazardous/the-very-small-quantity-generator-of-hazardous-waste.html> and 310 CMR 30.353(7) (link to MassDEP's regulations is below)

Please note: Hazardous gasoline-water mixtures should not be mixed with waste oil. While mixing non-hazardous gasoline-water mixtures with waste oil is not prohibited, such mixing will degrade the recyclability and value of the waste oil, often leading to higher handling costs. See FAQ #3 below for additional information on proper waste oil management.

3. What are the requirements for managing fluids that are non-hazardous industrial wastewater?

Fluids removed from spill buckets or sumps, including gasoline-water mixtures that have been determined to be non-hazardous waste, must be managed as an industrial wastewater. An owner or operator that generates non-hazardous fluids, including gasoline water mixtures, may:

- A. Ship the fluids off-site by a common carrier to an industrial wastewater facility on a bill-of-lading for treatment and disposal;
- B. Discharge the fluids to a sewer connection in compliance with the facility's owner/operator's sewer use permit or with the permission of the local sewer authority; however, the local sewer authority might not grant approval due to the potential for sewer system explosions); or
- C. If the fluids are limited to gasoline-water mixtures, add the non-hazardous gasoline-water mixtures to hazardous gasoline-water mixtures, provided that the combined wastewater is managed in compliance with one of the three hazardous waste management options described above in the response to Question #2.

Please note: industrial wastewater must not be discharged onto the ground, into surface waters (including indirectly through a storm drain), or into a septic system. They may only be discharged to a sewer connection with the permission of the local sewer authority.

4. How should diesel oil-water and kerosene-water mixtures be managed?

Diesel oil-water and kerosene-water mixtures are regulated as a waste oil if a discernible layer of diesel oil/kerosene is present on the water layer (i.e. there is more than a sheen). Diesel oil-water and kerosene-water mixtures that have a discernible layer of oil and are not contaminated with hazardous or other wastes may be:

- A. Recycled directly by burning for energy recovery in equipment designed to burn diesel oil or kerosene (a water separator in the equipment may be necessary to process the fuel mixture before it is burned). Depending on the type of fuel burning equipment and whether the oil burned is spec or non-spec oil, this type of recycling would require either an on-site recycling notification to MassDEP or a permit issued by MassDEP.; or
- B. Shipped off-site as "used oil fuel" to a facility that separates the water layer and markets the oil layer to burners or to other marketers of used oil fuel. Please note that a recycling permit may be needed for this option. If you are thinking of using this option, please contact MassDEP for information on your specific situation; or
- C. Shipped off-site as "used oil fuel" directly to a facility that burns the fuel after separating it from the water layer (a MassDEP recycling permit may be necessary); or
- D. Mixed with other waste oils generated on-site and recycled as described in options 2. and 3. above. Please note that, while mixing diesel oil-water and kerosene-water mixtures with waste oil is not prohibited, such mixing may degrade the recyclability and value of the mixtures, leading to higher handling costs. Such waste oil-water mixtures cannot be mixed with other hazardous waste. While not often practical, the owner/operator may also separate the water from the oil layer onsite, combine the oil layer with other waste oil and manage the combined material as waste oil. The water layer could then be (1) discharged to a sewer connection in compliance with the owner's/operator's sewer use permit or with the permission of the local sewer authority, or (2) shipped off-site as industrial wastewater, either separately or with other non-hazardous wastewaters; or

- E. Shipped off-site as waste oil on a hazardous waste manifest.
- F. Diesel oil-water and kerosene-water mixtures with only a sheen present on the water surface are not considered to be a waste oil, and can be handled as a non-hazardous oily industrial wastewater (See response to Question #3 above). The owner/operator may need an oil/water separator to treat the mixture before it is shipped off-site.

5. Where can I find more information on these topics?

- **The Very Small Quantity Generator of Hazardous Waste (VSQG)**
<http://www.mass.gov/eea/agencies/massdep/recycle/hazardous/the-very-small-quantity-generator-of-hazardous-waste.html>
- **A Summary of Requirements for Small Quantity Generators of Hazardous Waste**
<http://www.mass.gov/eea/docs/dep/recycle/laws/sqgsum.pdf>
- **Know Your Generator Status & Storage Limits**
- <http://www.mass.gov/eea/agencies/massdep/recycle/hazardous/hazardous-waste-generator-status-and-storage-limits.html>
- **Safe Handling of Waste Oil for Burning in Space Heaters**
<http://www.mass.gov/eea/docs/dep/recycle/laws/spacehtr.pdf>
- **Waste Oil, Used Oil Filters, and Waste Oil Space Heaters**
<http://www.mass.gov/eea/docs/dep/recycle/hazardous/autowoil.pdf>

Leak Detection Requirements

1. Are facilities still required to perform daily inventory monitoring?

Daily inventory monitoring is only required for UST systems that are not double-walled and do not have a continuous interstitial space leak detection monitoring system or a continuous in-tank leak detection monitoring system. Daily inventory monitoring is no longer required for any other types of UST systems. However, facility Owners/Operators may choose to perform daily inventory monitoring if they wish to.

Maintenance and Repair of UST Systems (NEW)

1. Is lining or relining of USTs allowed under the new UST regulation?

No. In March 2008, MassDFS prohibited any relining of USTs. Effective January 2, 2015, MassDEP adopted regulations clarifying this prohibition to preclude the lining of tanks that were not previously lined.

310 CMR 80.24(6), the prohibition against lining or relining any tank reads:

After January 2, 2015, an Owner or Operator shall not line or reline any tank to extend the operating life of the UST system.

2. Can a tank determined to have had leakage or a release, as a result of a failed tightness test or otherwise, be repaired and brought back into service?

Yes, under certain specific conditions. In accordance with 310 CMR 80.33(1) and (2), the Owner or Operator of a tank determined to have had leakage or a release, must be emptied of all regulated substance within 24 hours of said determination, if there is a release, and within 72 hours if there is leakage.

The tank determined to have had leakage or a release may be repaired and brought back into service, after all regulated substance is removed as noted above, under the following conditions only:

- A. The repairs to the tank must be performed by the manufacturer of the tank;
- B. The tank must be re-certified or re-warranted in writing by the manufacturer before it is returned to service; and
- C. The tank must pass a tightness test in accordance with 310 CMR 80.32 before it is returned to service.

If a tank cannot be repaired in accordance with these conditions, it must be permanently closed-in-place or removed.

Nothing in this FAQ or 310 CMR 80.00 shall affect the Owner and Operator's notification obligations under 310 CMR 40.0000.

Monthly Visual UST Inspection Requirements

1. Who can perform monthly visual UST inspections?

Only a MassDEP certified Class A or B operator, or someone under the direction of a MassDEP certified Class A or B operator, can perform monthly visual inspections (310 CMR 80.35(1)).

Please note: a person "under the direction of a Class A or B operator" is someone trained by a Class A or B operator to perform monthly inspections in accordance with 310 CMR 80.35.

2. What is covered in a monthly visual inspection?

- A. **Electronic Monitoring Equipment** In accordance with 310 CMR 80.35, the monthly visual inspection must verify that electronic monitoring equipment is on and properly operating. Electronic monitoring equipment includes interstitial space monitoring, in-tank monitoring, monitoring of sumps and spill buckets and impressed current cathodic protection monitoring systems.

The standard for verifying that electronic monitoring systems are "on" and "properly operating" is a visual inspection of the system's consol panel and/or rectifier, as applicable.

- If the consol panel and/or rectifier do not indicate a "warning" or "alarm" at the time of the inspection and/or the LED panel reads "ALL FUNCTIONS NORMAL", or words to that effect, then the electronic monitoring equipment is on and properly operating.
- If the consol panel and/or rectifier indicate a system "warning" or "alarm" (i.e., a system malfunction, not a warning as a result of detecting leakage, a release, or loss of corrosion protection), or the LED panel reads anything other than "ALL FUNCTIONS NORMAL", or words to that effect, the system is on, but not properly operating.
- If there are no consol and/or rectifier indicators or LED reading, the electronic monitoring equipment is not on and not properly operating.

- B. **Spill Buckets, Covers and Sensors**

The inspection must verify that:

- All spill buckets are clean and free of solid and liquid material.
- All spill buckets and covers are free of cracks and holes.
- All spill bucket sensors, if applicable, are set in accordance with manufacturer's specifications.
- If the answer to the three criteria above is "Yes" or "NA", all spill buckets, covers and sensors are being maintained.

- C. **Color-coded Grade Level Fill Covers**

UST Owner and Operators must paint and maintain fill pipe covers in accordance API Recommended Practice 1637, 3rd Edition, 2006, *Using the API Color-Symbol System to Mark Equipment and Vehicles for Product Identification at Gasoline Dispensing Facilities and Distribution Terminals* (310 CMR 80.24(4)).

The inspection must verify that:

- All grade level fill covers are properly color-coded in accordance with API RP 1636, including noting the grade(s) of gasoline, any alcohol based fuels, distillates and biodiesel blends containing under 20% biodiesel, and any waste oil.

If the color-coding on all applicable grade level fill covers is clearly legible, the color-coded fill covers are being maintained.

D. How are monthly inspection results recorded?

Monthly inspection results must be recorded in an inspection report or log, including repairs. This report or log can be maintained electronically or in paper form.

Permanently Closing UST Systems in Place

1. When can an UST system be permanently closed in place?

An UST system can be permanently closed in place for the following two scenarios (310 CMR 80.43(3)):

- A. The UST system is located under a building and cannot be removed without first removing the building; or
- B. The UST system is located so that it cannot be removed without endangering the structural integrity of another UST system, structure, underground piping, or underground utilities.

2. Who prepares the determination whether a UST can be removed or not?

The UST Owner or Operator must retain a registered professional civil or structural engineer to determine whether the UST system meets the regulatory requirements for closure in place (see question 1 above).

The professional engineer determination must include the following:

- The name and address of the UST system Owner.
- The name and address of the facility where the UST system is located.
- A detailed written description of why the UST system should be closed in-place and not removed, including sketches and photographs to support the determination formatted for 8.5x11 paper.
- A schedule for completing the proposed permanent tank closure in-place.
- The engineer must sign and stamp the determination with his or her professional engineer's stamp.

The professional engineer must submit his or her determination by email as an attachment to:

- dep.ust@state.ma.us
- Please enter "Closure In-Place Request" in the subject line.

3. How long does MassDEP have to review and approve a permanent closure in-place determination?

MassDEP has 30 days to review the determination. If the Department does not notify the Owner within 30 days, the Owner or Operator may proceed with the closure-in-place.

4. After notification of the determination to close the UST system in place, what are the requirements for permanently closing a UST system in-place?

To permanently close a UST system in-place, the system Owner or Operator must:

- A. Remove all solid and liquid material from the UST system in accordance with the applicable cleaning and closure standards found at 310 CMR 80.47;
- B. Dispose of all removed solid and liquid material in accordance with federal, state and local requirements; and
- C. Have the tank filled with clean sand, concrete slurry mix or other inert material approved by MassDEP. Requests to use an inert material other than clean sand or concrete slurry mix to fill a tank should be included in the engineer's determination described in 2. above.
- D. The tank closure is not completed, until the UST Owner or Operator has conducted an assessment for the presence of a release of regulated substances in accordance with 310 CMR 80.43(4).

5. Is an UST Owner or Operator required to notify MassDEP when the UST system closure is completed?

Yes. Within 30 days of UST system being filled, the UST Owner or Operator must submit an updated Registration documenting that the UST system has been permanently closed in-place. A copy of the required assessment must be submitted with the updated Registration.

Regulated Substances

1. What is a regulated substance under 310 CMR 80.00?

A regulated substance is:

- A. Any substance in the U.S. Environmental Protection Agency's List of Hazardous Substances and Reportable Quantities (40 CFR 302.4, <http://www.epa.gov/osweroe1/docs/er/302table01.pdf>); and
- B. Waste oil, but not any other hazardous waste regulated under M.G.L. c. 21C; and
- C. Petroleum, including crude oil or any fraction of crude oil which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 p.s.i. absolute).

2. How are "de minimus" concentrations of a regulated substance covered?

USTs that contain a *de minimus* concentration of a regulated substance are exempt from the requirements of 310 CMR 80.00 if:

- A. The concentration of regulated substance does not exceed the "GW1" groundwater reportable concentrations in the Massachusetts Oil and Hazardous Materials List at 310 CMR 40.1600: *Massachusetts Oil and Hazardous Material List*; or
- B. A regulated substance is not listed at 310 CMR 40.1600: *Massachusetts Oil and Hazardous Material List*, the UST Owner/Operator can demonstrate a regulated substance's *de minimus* concentration by demonstrating that the regulated substance does not display characteristics of ignitability, corrosivity, flammability and/or toxicity, and keeps records of said demonstration in accordance with 310 CMR 80.36(7) until the Owner/Operator no longer claims the exemption.

Single-Wall Steel Tank Closure Requirement

1. What tanks must be closed in place or removed by August 7, 2017?

In accordance with 310 CMR 80.15, all single-walled steel tanks must be closed in place or removed by August 7, 2017 except:

- A. Single-walled steel consumptive use tanks; and
- B. Single-walled steel tanks that were relined prior to August 8, 2007 in accordance with API 1631, 1983 Edition, and the Owner or Operator has:
 - (a) a permit and approval issued by the Head of the local Fire Department for such relining, and
 - (b) a current, legally valid warranty for said relining.

For purposes of the August 7, 2017 closure requirement, MassDEP does not consider the following tanks to be single-walled steel tanks:

- single-walled steel tanks wrapped with fiberglass/aramid,
- single-walled steel tanks wrapped with carbon fiber or,
- single-walled steel tanks wrapped with plastic compounds

Please see the FAQ about Permanently Closing Tanks in Place (above) for information about the requirements that apply to single-walled steel tanks and other UST systems that are not removed.

2. Is a single-walled steel tank that is temporarily out-of-service subject to the August 7, 2017 closure requirements?

Yes. Single-walled steel tanks, that are “temporarily out-of-service” in accordance with 310 CMR 80.42, are subject to the August 7, 2017 closure deadline.

Testing Sumps and Spill Buckets (NEW)

1. Can fluid used for hydrostatic testing of spill buckets and sumps be re-used for multiple tests?

Yes. Testing fluid used for hydrostatic testing of spill buckets and sumps can be used for multiple tests. The test fluid is not considered to be a waste until it is discarded.

MassDEP’s UST Regulation requires that spill buckets and sumps must be kept clean and free of solid and liquid material at all times. Any liquids or solids that enter spill buckets or sumps should be removed immediately and managed properly. To minimize testing fluid contamination, spill buckets and sumps should be cleaned of all material containing petroleum and/or other regulated substances before starting a test, which will minimize contamination of the testing fluid. During the testing procedure, the testing fluid may be contaminated by materials remaining in an uncleaned spill bucket or sump. Reusing this testing fluid increases the potential need to manage the testing fluid as a hazardous waste once it is ready to be discarded. Therefore, MassDEP recommends (but does not require) using new testing fluid for each test.

UST facilities may conduct their own hydrostatic tests of their spill buckets and sumps. In these cases, the facility is responsible for determining whether the waste testing fluid needs to be managed as a hazardous waste or a non-hazardous industrial wastewater, and for ensuring compliance with all the proper waste management requirements.

If an UST facility is contracting with a testing company, MassDEP suggests that the UST facility ask the testing company whether they will use new or reused testing fluid, and clarify who will be responsible for proper disposal of the fluid when it needs to be discarded.

If a facility reuses testing fluids themselves, or hires a contractor who uses testing fluids for multiple tests, MassDEP recommends (but does not require) that equipment be available to remove the fluid from the spill bucket or sump immediately if a leak is detected. This will prevent the introduction of potentially contaminated fluids into the environment.

Once testing fluid is ready to be discarded, the generator of the testing fluid must determine whether it must be handled as a hazardous waste or a non-hazardous industrial wastewater. Please see the FAQ entitled “Contaminated Wastewater Management at UST Facilities” above for more information about making this determination and requirements for managing hazardous and non-hazardous wastewater.

Third Party Inspector Requirements

1. What are the third-party inspector conflict of interest prohibitions?

310 CMR 80.49(6) prohibits third-party inspectors (TPIs) from conducting third-party inspections where the TPI would have a potential conflict of interest. This regulation prohibits a TPI from inspecting a UST system where:

- A. He or she owned or operated the UST facility in the year prior to the third-party inspection;
- B. In the year prior to the date of the third-party inspection, he or she performed work on the UST system and:
 - is related to the Owner or Operator of the UST system, or
 - is related to an employee or contractor who performed work on the UST system in the year prior to the date of the third-party inspection;
- C. He or she was an employee of the Owner or Operator or contractor who performed work on the UST system in the year prior to the third-party inspection;
- D. He or she was the designated Class A, B or C operator of the UST system in the year prior to the third-party inspection; or
- E. He or she has a financial interest or daily on-site responsibilities in the year prior to the third-party inspection.

2. What does “performed work on the UST system” mean?

“Performed work on the UST system” means physical work on the UST system, such as installing, repairing or replacing components or conducting tests on the UST system, etc. A person who worked at a UST facility where his or her responsibilities did not include work performed on the UST system is not subject to the one-year conflict of interest standard.

3. Can a Third-Party Inspector inspect an UST system on which he or she has performed maintenance work?

A person who works alone as a maintenance contractor and is also a third-party inspector cannot perform a Third-Party Inspection on a UST system that he or she has performed maintenance work on in the prior year. However, a business that employs more than one person can split up roles among employees. For example, Employee A can serve as the TPI for a facility; while at the same time Employee B from the same company can serve as the maintenance technician.

UST Installation Requirements

1. Is a permit required to install a UST system?

No, neither MassDEP nor DFS requires a permit to install a UST system. However, please note that:

- A. MassDEP does have UST system and component installation requirements that can be found at 310 CMR 80.14 through 80.22

- B. DFS requires a permit to store flammable and combustible material in a UST system (FP-6). The FP-6 permit is issued by the local fire department.
- C. Individual municipalities may have their own UST permits/forms issued by the Mayor's Office, Board of Selectmen, Planning Board or Board of Appeals, etc. Please contact the municipality where the tank is being installed for more information.

For more information, see the "Joint MassDEP/DFS UST Program Coordination" memo:

<http://www.mass.gov/eea/docs/dep/toxics/ust/ust-memo.pdf>

UST Systems Taken Temporarily Out of Service

- 1. Are UST systems taken temporarily out of service before January 2, 2017, under the DFS regulations able to remain out of service for the five years allowed under 310 CMR 80.00?**

Yes, a UST system that was taken temporarily out of service (TOS) in compliance with the applicable DFS requirements before January 2, 2015, and is in compliance with the applicable requirements of 310 CMR 80.00 can keep its TOS status for five years from the date on which the UST system was taken temporarily out of service.

Revision Tracking

Section/Question Modified	Date of Revision Publication
Initial Publication	May 29, 2015
Single-Walled Steel Tank Closure Requirement	Added August 7, 2015
Permanently Closing UST Systems in Place	Added August 7, 2015
Monthly Visual Inspection Requirements	Added August 31, 2015
Permanently Closing UST Systems in Place	Added August 31, 2015
Contaminated Wastewater Management at UST Facilities	Added March 3, 2016
Maintenance and Repair of UST Systems	Added March 9, 2016